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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of :

: Group Art Unit.: 1773

Serial No.: 10/489,419 : Examiner: LE, Hoa T.

Filed: March 12, 2004 :

Title:

DECLARATION

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

SIR:

I being duly warned, declare that:

I am a German citizen, residing at Darmstadt, Germany; I studied chemistry at the Universities of Heidelberg and Darmstadt, from 1989 to 1997; I graduated from the University of Darmstadt in 1997; I obtained my Ph.D. degree from University of Bochum in 2001. In 2000 I joined the Research & Development Department (New Business Specialty Chemicals) of Merck KGaA, Darmstadt, Germany.

I am author or co-author of numerous publications and patent applications in the field of smart inorganic materials, such as semiconductors and photonic crystals.

I am informed that a document entitled "Test Report" was filed with the USPTO on December 1, 2005.

I confirm that:

I am the person under whose supervision the experiments were performed.

All statements made in said test report of my own knowledge are true, all statements made therein on information and belief are believed to be true, and all statements made therein are made with the knowledge that whoever in any matter within the jurisdiction of the Patent and Trademark Office, knowingly and willfully falsifies, conceals, or covers up by any trick, scheme, or device a material fact, or makes any false, fictitious or fraudulent statements or representations, or makes or uses any false writing or document knowing the same to contain any false, fictitious or fraudulent statement or entry, shall be subject to the penalties set forth under 18 U.S.C. 1001, and that violations of this paragraph may jeopardize the validity of the application or document, or the validity or enforceability of any patent, trademark registration, or certificate resulting therefrom.

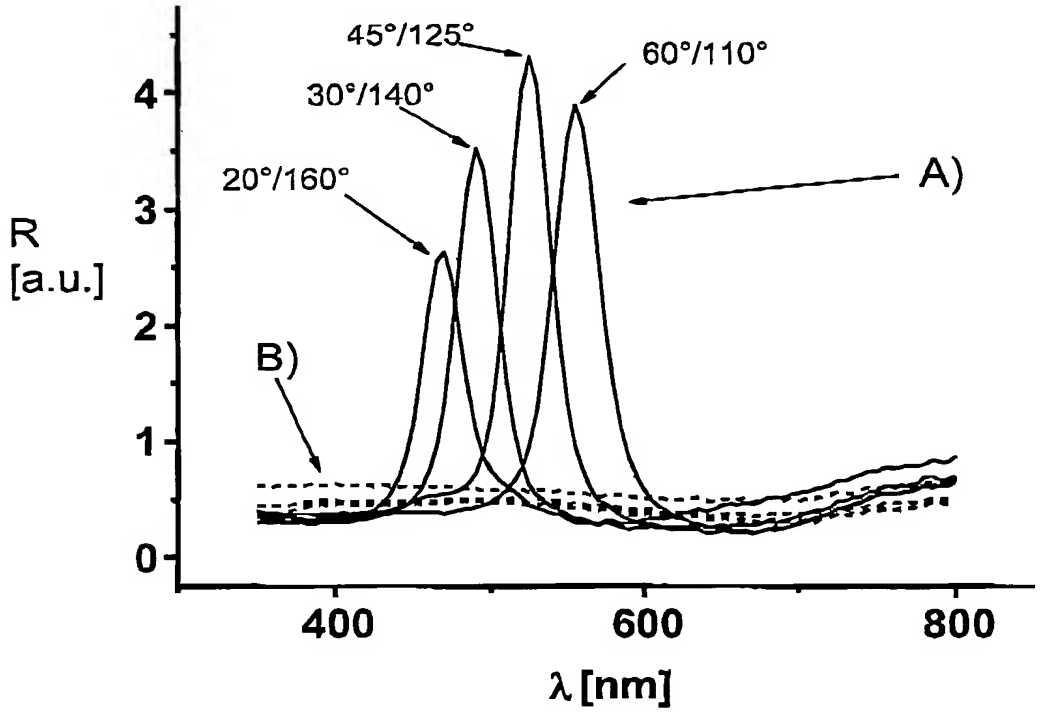
Sincerely,

Name:
Dr. Holger Winkler

Test Report

Sample A: A film produced according to example 3A of US 10/489,419. (Average particle diameter: 240 nm) The resulting film shows strong and brilliant color effects.

Sample B: Core/shell particles were produced according to example 2 of US 6,337,131 and dried according to example 3 of US 6,337,131 (Average particle diameter: 230 nm). The dried film was further processed by application of the methods described in examples 2 and 3A of US 10/489,419 to simulate industrial processing of polymeric materials. The resulting film shows opaque behaviour with very low brilliance and a dominating white appearance.



Reflection spectrum: Comparison between sample A (acc. to invention) and sample B (prior art; dotted lines).

The amorphous film of sample B acts as a diffuse scatterer, i.e. white appereance. In contrast to this, the film of sample A shoes a well-defined angle-dependent spectrum. (Definition of angles: α being angle of incidence, β being angle of reflection)